



PCAC

Perchlorate Community Advisory Group



Meeting Minutes

Friday, May 5, 2006
2:00 PM

I. **Pledge:** Ms. Sylvia Hamilton, PCAG Chair, led the Pledge of Allegiance

II. **Administrative Items:**

- A. Agendas, Meeting meetings, and attendee sign-in sheets back table
- B. Open Forum- no discussion topics
- C. March Meeting minutes approved as written
- D. Thanks to Lion Club Hall members

III. **Presentations/Discussions:**

- A. **Llagas Subbasin characterization report** (Jerry Orlando) – Please see attached document.

1. **Conceptual Hydrogeological Model:**

Q: Are there similarities between perchlorate and nitrate? Nitrate concentrations spike in the winter and perchlorate decreases in winter.

A: As water level rises, residual nitrate that is closer to the surface is dissolved. Also, nitrate continues to be added to the surface soils and shallow groundwater from fertilizer applications, septic systems, and animals.

Q: What is the definition of a shallow well?

A: <200 Feet

Q: Why is the higher concentration in the aquitard?

A: The low permeability acts like a sponge with pockets. In the report, they indicate 1900 ppb levels found in the aquitard is indicative of what the levels used to be.

Q: How is multi-level testing done?

A: One large tube is made of several smaller tubes, each of which measure at different levels.

Q: Do we know how much perchlorate was dumped into the ground at the Olin site during different periods of time?

A: We do not have that information. We could request Olin to give us what they discharged as far as mass or it could possibly be obtained as part of the background concentration study.

The report indicated that the perchlorate has been sucked into the deep aquifer by pumping. The Board asked for more information about the area immediately south of

the site because that is where the highest concentrations have been found and where plume control is most likely to be needed.

2. **Perchlorate Background Investigation:**

Q: Do highway safety flares being used on the freeway add to the problem?

A: There is a small residual amount left on the freeway because most of the perchlorate is burned out when the flare is used. Policemen that use flares on highways will not pick them up afterwards because of the possibility of them re-igniting in the car. There has never been a groundwater contamination case caused by the use of highway flares.

Q: UTC site pathways have been identified. Is that a hypothesis?

A: Yes, it is a hypothesis. There is no conclusive proof as of yet.

Q: Why is the forensic study taking so long?

A: The Water District has received funding from the EPA for the project, which has specific requirements for how projects proceed, which can slow down the process. The water district anticipates the work starting this summer. The study is expected to help determine whether the technology available today can distinguish between the types of perchlorate.

Q: If the agencies find out that there is no other source, except Olin, that is responsible for contaminating the waters, will the involved agencies get the money back since it is taxpayer money that is paying for the study?

A: Currently, Olin is paying for the time the Water Board staff spends on this project.

Q: Was the Santa Clara Valley Water District able to recover the money they used to supply residents with bottled water when the perchlorate problem was first discovered?

A: The water district and Olin are early in the process of cost recovery, and the water district is optimistic that they will receive reimbursement.

A community member clarified that there is a difference between being able to detect perchlorate and detecting an amount of perchlorate large enough to pose a health risk. Also, a requirement to clean up groundwater does not necessarily mean there is a health risk.

Q: What types of fertilizers have been used here in the past? Olin believes that these fertilizers have contributed to the problem.

A: Olin is referring to Chilean fertilizer, which is usually used for tobacco and citrus. Neither one of those things have been grown here in the last 100 years.

Q: Farmers have said that the Chilean fertilizer was very expensive and it wouldn't have made sense for them to use it.

A: Farmers throughout the area were surveyed and none of them used this particular fertilizer.

There is perchlorate in the bleach that some companies are using so they need to find the way of mitigating the environmental impacts. It was irresponsible for Olin to

mention mushrooms without any proof of groundwater contamination from their business. The report also mentioned that another potential contamination source is municipal water wells. However, the disinfectant that public water supplies use has to meet standards for chlorate, as precursor to perchlorate. Bleach that has been sitting on the shelf can manifest itself into high levels of perchlorate.

3. **Shallow Aquifer Evaluation:**

Q: What kinds of crops take in perchlorate?

A: Lettuce and other produce that hold a lot of water.

If other sources of contamination are proven, Olin may have lower cost for remediation efforts.

4. **Southern Extent Groundwater Flow Assessment**

Q: Recently, there has been a slight increase, from 35 to 55, in the number of wells with perchlorate concentrations above the Public Health Goal of 6 ppb.

Due to time constraints, PCAG agreed to finish this discussion at a future meeting. Zohra will send an email out when the Characterization Report binder is in the Morgan Hill Library repository.

Assemblymember John Laird – The Assemblyman reported that the Legislature has successfully negotiated a bond proposal for the November ballot. There is also an initiative bond measure that covers other aspects of water management. The Legislature's bond package includes \$5 million for flood control projects, some of which would cover the State's share of local flood control project costs. The bond also includes \$2 million for county roads.

Mr. Laird reported that he is continuing to track the perchlorate issue. He will be talking with City of Morgan Hill officials regarding the source of perchlorate in the City's wells. He has urged the Regional Water Board to ensure that residents whose bottled water is discontinued can be secure that the water they drink is uncontaminated and monitoring is sufficient to immediately detect any upward trends. He also reported that AB 1421, which would revise the law regarding replacement water, is in a Senate policy committee. They are working with the opposition to see if there is an opportunity to address the bottled water issue in this region without having unintended consequences related to broader statewide water quality issues.

B. **Central Coast Water Board (Thea Tryon & Hector Hernandez):**

1. **Northeast Flow (NE Flow):** The May 2nd letter from the RB to the City of Morgan Hill addresses the perchlorate contamination in the Nordstrom well only. This well is NE of the site but the letter does not address the entire NE issue. After careful analysis, the RB concludes that there is not enough information to say Olin is responsible for perchlorate found in the Nordstrom well but that does not mean they will not have Olin finish conducting additional investigation. The results of the additional investigation will be included in the next characterization report. The letter only deals with perchlorate detections in the Nordstrom well. The Water Board will be issuing a clarification letter within the next few weeks. The May 2nd letter was written in response to the City of Morgan Hill's request to assign responsibility of perchlorate in the Nordstrom well to Olin. The letter does not require Olin to do anything in relation to the Nordstrom well.

Q: Is the mushroom plant on Santa Teresa the one northeast of the site?

A: No, they are talking about the one on Condit and North of Diana.

Olin found 190 parts per billion perchlorate in a well at a mushroom farm and that's why this discussion has been sparked.

Q: Would the wastewater have a constant concentration?

A: We do not have enough information to make an accurate assessment.

- C. **Domestic Well Ion-Exchange Systems Update (Thomas Mohr):** Olin is still installing ion-exchange units. They now have 11 units installed and have a goal of about 18 units. They are currently putting units on wells of 10 ppb and above. The California Department of Health Services is reviewing US Filter's latest submittal related to certification. The water district provided DHS with review comments on the submittal.

IV. **Additional Topics:**

- A. **Student Outreach Project:** Teachers in Morgan Hill high schools have been contacted and they will be assessing the repository perchlorate materials so they can do classroom activities and research projects. Ms. Hamilton inquired if anyone has contacts with teachers in Gilroy.

- B. **Groundwater Guardian (GWG):** We are finalizing a PCAG brochure about how the community can be more involved in this issue.

Ms. Tracy Hemmeter reported that, in response to Mr. Cerruti's observation of variances in results between labs, she is going to review some of the past sampling data.

Ms. Tryon said that Regional Water Board is currently working with Mr. Rick McClure about the issue and he will be discussing it with his managers. If there is variability with the lab results, then that might be something to take back to the State Water Board for additional consideration of the replacement water order.

- C. **Perchlorate Working Group (PWG):** The PWG discussed many of the same issues as PCAG, including the characterization report, plume migration control, and the Nordstrom well letter.
- D. **Water District Federal Grants and Project Planning Update:** Mr. Mohr reported that they are currently on the contracting phase of the study.
- E. **Olin at PCAG:** Ms. Hamilton mentioned that there is a possibility that Olin might come to the next PCAG meeting. A PCAG member requested to have Olin speak about having manufacturer's reformulated products that contain perchlorate as a discussion topic when they come to PCAG.

V. **Next Meeting** – Friday, June 2nd from 2- 4 pm

Meeting was adjourned at 4:00 p.m..

Minutes submitted by Zohra Karimi